

July 10, 2018

Mr. David Thebearge **Boston Concrete Corporation**706 Broadway St.

Lowell, MA 01854

Re: NPDES Stormwater Visual and Analytical Reports

Dear Mr. David Thebearge,

Enclosed please find the Stormwater Visual Examination Report, Analytical Report and associated Chain of Custody documentation for Boston Concrete in Lowell, MA. This site was visited on June 21, 2018. Please call me if you have any questions or require any additional information. Thank you.

Sincerely,

John D'Andrea

Division Manager – Environmental Monitoring



EST Associates, Inc. 51 Fremont Street Needham, MA 02494 Phone (781) 455-0003

# **Chain of Custody Record**

Laboratory:

N/A A

B - Bacteria	V-VOA	G - Glass	P - Plastic	Container Type
<ol><li>Drinking Water</li></ol>	3. Soil	<ol><li>Groundwater</li></ol>	<ol> <li>Wastewater</li> </ol>	Samp
•	7. Other	<ol><li>Storm Water</li></ol>	<ol><li>Surface Water</li></ol>	Sample Type

LOCATIO	Description:	Phone #:	Contact:		Address:	Site:			Associates, Inc.	
LOCATION (Sample	Description: Stormwater Quarterly Visuals	Phone #: (978) 937-7222	Contact: David Thebearge	Lowell	706 Broadway St.	Boston Concrete Corporation			Inc.	
Sample Container	uarterly Visua	2	rge	MA 01	/ St.	ete Corporatio			Fax (781) 455-8336 www.estassociates.com	Phone (781) 455-0003
Container	NS			01854-		'n			5-8336 ociates com	(781) 455-0003
Sampling   Preservative	Fa	Phon	Contact:		Addre	Cli		B - Bacteria	V-VOA	P - Plastic
Prese	Fax #:	e#: (9	act: Da	<u>ار</u>	<u>ess:</u> 7(	Client: Bo		ត្តិ:		Ü
rvative		Phone #: (978) 937-7222	David Thebearge	Lowell	Address: 706 Broadway St.	<b>Boston Concrete</b>		4. Drinking Water	3. Soil	Wastewater
			ē	MA	<u>Ş</u>	e Corporation		è	7. Other	
l ahoratory Analysis				01854-		ration			vvalei	5. Surface Water
plycic		$\Box$					EST Invoi		Lab Report To:	Lab Invoice To: N/A
		Rush			Sign	722	ce To: Bos		rt To:	ce To: N/A
Noto		hDay Turnaround			Signed	7222-Q#-00 O# S000316	EST Invoice To: Boston Concrete			

*All samples chilled to 4 degrees celsius.			Additional Comments:	Matt Gould 12	Sampler's Name (Print) Sig						Outtall 001	identification)	LOCATION (Sample
nilled to 4 d				youth	Signature						NA	Type	Sample
legrees co			\	A Va							N/A	_	Container
elsius.				-	)						N/A 0* 6/2/	Type #	ainer
				6/2/18	DATE						6/21	Date	Sampling
				1430	TIME						1430	Time	
U	4	ယ	2	1	NUMBER TRA							K	Preservative
				Matter March	NUMBER TRANSFERS RELINQUISHED BY						*Visual Examination Only		
					TRANSFERS ACCEPTED BY						nly		Laboratory Analysis
					Y DATE								Notes
					TIME								

### Storm Water Quaterly Visual Examination Penort

	ete - Lowell, MA
Facility Name: Boston Concrete	
Date / Time: 6/21/18	Personnel Involved: Matt Crown
Outfall: 001	Date of Last Rainfall: 6/18/18
Amount of Rain (inches)	Duration of Storm: 30 minutes
Nature of Discharge (Runoff or Snowmelt or Bo	oth): Runoff
Record your visual observations of the sa	imple quality in the space provided below.
Color: Light brown	
Odor: None detected	
Clarity: Hazy	
Floating Solids: None detected	
Settled Solids: None detected	
Suspended Solids: Fine particulate	
Foam: None detected	
Dily Sheen: None detected	
Other Observations: No obvious source	of pollution
Sources of Pollution / Fo	above and results of follow up inspections

Signature Matt A



EST Associates, Inc. 51 Fremont Street Needham, MA 02494

# **Chain of Custody Record**

Laboratory:

Alpha Analytical Labs (508) 898-9220

### Container Type Sample Type

Surial CO	Outlan OO I	nuerillication)	ple	Description: Quarterly Benchmark Sampling	Phone #: (978) 937-7222	Contact: David Thebearge		Address: 706 Broadway St.	Site: Boston Concrete Corporation			Associates, Inc.	
<u>ග</u>	6 25	ď	Sample	mark Samı		W	MA		Corporation			Fax (781) 455-8336 www.estassociates	Phone (781) 455-0003
1L P 11 3	250 ml P 1 16/21	Size Type # Date	Container S	oling			01854-		on			Fax (781) 455-8336	) 455-0003
	21 1430	te Time	Sampling	Fax #:	Phone #:	Contact:		Addre	Client:		B - Bacteria	V - VOA	P - Plastic
None	HNO3	*	Preservative			ıct: David Thebearge	Lowell	Address: 706 Broadway St.	nt: Boston Concrete			2. Groundwater 3. Soil	
TSS	Fe		Laboratory Analysis		.7222	bearge	MA 01854-	lway St.	ncrete Corporation		4. Drinking Water	7. Other	
			Vsis		Ruch			Q# SQ( Signed	7222	EST Invoice To: Boston Concrete		Lab Report To: See Comments	Lab Invoice To: EST
		0000	Notes					Q# SQ00316 Signed	7222-Q#-00	on Concrete		Comments	

LOCATION (Sample   Container   Sampling   Preservative   Laboratory Analysis    I type   Size   Type # Date   Time    Outfall 001   6   250 ml   P   1   4/2)   4/30   HNO3   Fe    Outfall 001   6   1L   P   1   1   1   1   1   1   1   1   1	*All samples c			Send reports to: dthebearge@boston	me	Name (Print)							Outfall 001	Cuttall 001	ideliulication)	LOCATION (Sample
Preservative  HNO3 Fe  None TSS  None TSS  None TSS	hilled to 4 d			roncrete co	Main X	nature							מ		- ype	Sample
Preservative  HNO3 Fe  None TSS  None TSS  None TSS	egrees cels		iii a Juanure	m & idendro	No.							+	+	_		Contair
Preservative  HNO3 Fe  None TSS  None TSS  None TSS	ius.		a@esta			<b>)</b>			-				_			ìer
Preservative  HNO3 Fe  None TSS  None TSS  None TSS			associat		1/1/2/1	DATE						6	-	12/01	Date	San
			es.com		9541 8	TIME						<	.	1430	Time	npling
	O1	4	3	2	1 70/6	NUMBER TRANS						None		HNO3	*	Preservative
					and the state of t							- vv		T O	•	Laboratory Analysis



### ANALYTICAL REPORT

Lab Number:

L1824013

Client:

EST Associates, Inc.

51 Fremont Street

Needham, MA 02494

ATTN:

John D'Andrea

Phone:

(781) 455-0003

Project Name:

BOSTON CONC. QRTLY BENCHMARK

Project Number:

**BOSTON CONCRETE CORP** 

Report Date:

07/02/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



L1824013 07/02/18

Lab Number: Report Date:

BOSTON CONC. QRTLY BENCHMARK

Project Name:

**BOSTON CONCRETE CORP** Project Number:

Alpha Sample ID

Receive Date 06/25/18 06/21/18 14:30 Collection Date/Time 706 BROADWAY ST., LOWELL, MA Sample Location WATER Matrix OUTFALL 001 Client ID L1824013-01

**Project Name:** 

BOSTON CONC. QRTLY BENCHMARK

Lab Number:

L1824013

**Project Number:** 

**BOSTON CONCRETE CORP** 

Report Date:

07/02/18

### **Case Narrative**

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Nails Amita Naik

Authorized Signature:

Title: Technical Director/Representative

Date: 07/02/18

### **METALS**



**Project Name:** 

BOSTON CONC. QRTLY BENCHMARK

Lab Number:

L1824013

**Project Number:** 

**BOSTON CONCRETE CO** 

Report Date:

07/02/18

Lab ID:

L1824013-01

Date Collected:

06/21/18 14:30

Client ID:

OUTFALL 001

Date Received:

06/25/18

Sample Location:

706 BROADWAY ST., LOWELL, MA

Field Prep:

Not Specified

Sample Depth:

Matrix:

Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Ma	nsfield Lab										
Iron, Total	8.15		mg/l	0.050		1	06/27/18 08:30	0 06/28/18 09:32	EPA 3005A	19,200.7	PE

**SAMPLE RESULTS** 

Project Name:

BOSTON CONC. QRTLY BENCHMARK

Lab Number:

L1824013

Project Number: BOSTON CONCRETE CO

Report Date:

07/02/18

### **Method Blank Analysis Batch Quality Control**

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared		Analytica Method	
Total Metals - Man	nsfield Lab for sample(s):	01 Batc	h: WG1	130174-	1				
Iron, Total	ND	mg/l	0.050		_ 1	06/27/18 08:30	06/28/18 06:47	19,200.7	PE
			Prep Inf	ormatio	n				

Digestion Method: EPA 3005A

## Lab Control Sample Analysis Batch Quality Control

BOSTON CONC. QRTLY BENCHMARK **BOSTON CONCRETE CORP** Project Number: Project Name:

L1824013 Lab Number:

07/02/18 Report Date:

Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1130174-2

Iron, Total

Parameter

85-115 102

RPD Limits

Qual

RPD

%Recovery Limits

Qual

LCSD %Recovery

Qual

LCS %Recovery

ALPHA

## Matrix Spike Analysis Batch Quality Control

BOSTON CONC. QRTLY BENCHMARK

**BOSTON CONCRETE CORP** 

Project Number: Project Name:

Lab Number:

L1824013

07/02/18 Report Date:

	Native Sample	MS Added	MS Found	MS MS MSFound WRecovery Qual Found	MSD Qual Found		MSD Recovery RPD Qual Limits	Qual	Recovery Limits	RPD	Qual	RPD Limits
Lab As	Total Metals - Mansfield Lab Associated sample(s): 01	ple(s): 01	QC Batch	QC Batch ID: WG1130174-3 QC Sample: L1823882-01 Client ID: MS Sample	-3 QC San	nple: L1	823882-01	Client	ID: MS Sa	ample		
	0.445	-	1.47	102	1		,		75-125	a		20
Lab As	Total Metals - Mansfield Lab Associated sample(s): 01	ple(s): 01	QC Batch	QC Batch ID: WG1130174-7 QC Sample: L1824004-01 Client ID: MS Sample	-7 QC San	nple: L1	824004-01	Client	ID: MS Sa	ample		
	3.91	~	4.73	82	6		ı		75-125			20

### INORGANICS & MISCELLANEOUS



**Project Name:** BOSTON CONC. QRTLY BENCHMARK Lab Number:

L1824013

**Project Number:** 

**BOSTON CONCRETE CORP** 

Report Date:

07/02/18

**SAMPLE RESULTS** 

Lab ID:

L1824013-01

Date Collected:

06/21/18 14:30

Client ID:

OUTFALL 001

Date Received:

06/25/18

Sample Location: 706 BROADWAY ST., LOWELL, MA

Field Prep:

Not Specified

Sample Depth:

Matrix:

Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough Lab									
Solids, Total Suspended	280		mg/l	25	NA	5	-	06/27/18 12:35	121,2540D	JT



**Project Name:** 

BOSTON CONC. QRTLY BENCHMARK

Lab Number:

L1824013

Project Number: BOSTON CONCRETE CORP

Report Date:

07/02/18

Method Blank Analysis Batch Quality Control

Parameter	Result Qu	ualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Vestborough Lab	for sam	ple(s): 01	Batch:	WG11	30131-1				
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	06/27/18 12:35	121,2540D	JT

Lab Duplicate Analysis
Batch Quality Control

BOSTON CONC. QRTLY BENCHMARK

**BOSTON CONCRETE CORP** 

Project Number: Project Name:

L1824013 Lab Number:

07/02/18

Report Date:

ameter	Native Sample	0	Duplicate Sample	ple Units	RPD	Qual	RPD Limits	
General Chemistry - Westborough Lab Associated sample(s)	. 01	Satch ID:	QC Batch ID: WG1130131-2	QC Sample:	2 QC Sample: L1824013-01 Client ID: OUTFALL 001	Client ID: 0	UTFALL 001	
Solids, Total Suspended	280		280	l/gm	0		29	



ALPHA

Project Name: BOSTON CONC. QRTLY BENCHMARK

Project Number: BOSTON CONCRETE CORP

Sample Receipt and Container Information

Lab Number: L1824013 Report Date: 07/02/18

Serial\_No:07021820:55

Were project specific reporting limits specified?

YES

Were project specific reporting li Cooler Information

Cooler Custody Seal

Absent

Container Information	ormation		Initial	Final	Temp			Frozen	
Container ID	Container ID Container Type	Cooler	Н	Н	deg C	Pres	Seal	Date/Time	Analysis(*)
L1824013-01A	Plastic 250ml HNO3 preserved	٧	<b>~</b>	<b>%</b>	3.0	>	Absent		FE-UI(180)
L1824013-01B	Plastic 950ml unpreserved	⋖	7	7	3.0	\ \	Absent		TSS-2540(7)

L1824013

**Project Name:** BOSTON CONC. QRTLY BENCHMARK

Lab Number:

**Project Number: BOSTON CONCRETE COR Report Date:** 07/02/18

### **GLOSSARY**

### Acronyms

LCSD

MS

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any

adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis

of PAHs using Solid-Phase Microextraction (SPME).

- Environmental Protection Agency. **EPA** 

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes. - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated

MDL values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any

adjustments from dilutions, concentrations or moisture content, where applicable. - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for

which an independent estimate of target analyte concentration is available.

MSD Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's NC

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the

values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound

list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

### **Footnotes**

- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### **Terms**

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- Spectra identified as "Aldol Condensation Product"

В - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: Data Usability Report



**Project Name:** 

BOSTON CONC. QRTLY BENCHMARK

Report Date:

Lab Number:

L1824013

**Project Number:** 

**BOSTON CONCRETE COR** 

07/02/18

### Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
  of the analyte.
- E -Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.
- RE Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- J Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

**Project Name:** 

BOSTON CONC. QRTLY BENCHMARK

Lab Number:

L1824013

**Project Number:** 

**BOSTON CONCRETE CORP** 

Report Date:

07/02/18

### REFERENCES

Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

### **LIMITATION OF LIABILITIES**

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873 Revision 11

Published Date: 1/8/2018 4:15:49 PM

Page 1 of 1

### **Certification Information**

### The following analytes are not included in our Primary NELAP Scope of Accreditation:

### Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-

Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 300: DW: Bromide EPA 6860: SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

### Mansfield Facility

**SM 2540D:** TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

### The following analytes are included in our Massachusetts DEP Scope of Accreditation

### Westborough Facility:

### **Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE,

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

### Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan III,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil. Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.

### **Mansfield Facility:**

### Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. **EPA 522.** 

### Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Document Type: Form



www.estassociates.com Phone (781) 455-0003 EST Associates, Inc. Needham, MA 02494 Fax (781) 455-8336 51 Fremont Street

# Chain of Custody Renny

Sample Type water 5. Surface Water 6. Storm Water 7. Other 4. Drinking Water 1. Wastewater 2. Groumdwater Container Type B - Bacteria P - Plastic G . Glass V-VOA

3000	
~	
5	
5	
נ	
ב	
2	

Alpha Analytical Labs (508) 898-9220 oratory:

Serial\_No:07021820:55

Lab Report To; See Comments Lab Invoice To: ES

EST Invoice To: Boston Concrete

O# SQ00316 Signed 7222-Q#-50

Boston Concrete Corporation

706 Broadway St.

Address:

Client:

Boston Concrete Corporation

Site:

706 Broadway St.

Address:

01854-

MA

Lowell

01854

MA

Lowell

David Thebearge (978) 937-7222

Contact: Phone #:

David Thebearge

Contact: Phone #: Fax #:

(978) 937-7222

Day Turnaround Rush

> Quarterly Benchmark Sampling Description:

	Notes	e de la composição de l						The second state of the second					
- in the Assessing	Caporatory Arranysis		To the same of the	15S	A CAMPAGE AND	THE CHARLES AND THE CHARLES AN		The second secon	And the state of t	The second secon			
Sampling Preservative	*		HN03	None			1.2						
Sampling		Date   Time	12/2 1430	9							4 1		
Container		1 VCe	Q.	_ _					- Port				
Sample Co	Type Type	D SC	250 mi	-T  9				***************************************		The state of the s			
LOCATION (Sample Sa				Outfall 001			The second secon				THE REAL PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY	the state of the s	

RANSFERS/ACCEPTED BY

TIME MUMBER TRANSFERS RELINQUISHED BY

N 3

Send reports to: dthebearge@bostonconcrete.com & jdandrea@estassociates.com

Additional Comments:

"All samples chilled to 4 degrees celsius.

Page 18 of 18

1.12118 1470

DATE

Sonature

Sampler's Name (Print)

ব LC)